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# No longer a vision

## Fiber optics demand explodes at SWCC

By LARRY PETERSON  
CNA staff writer

Interested in an Iowa State University class in animal science?

Maybe an industrial training course in manufacturing operations?

At Southwestern Community College and seven other schools in Area 14, you could be enrolled in those classes and communicate with other students as far away as Iowa City or Dubuque.

Long-distance learning through fiber optics is no longer just a concept, or the wave of the future. In room 211 of Southwestern's instructional center, for example, the Iowa Communications Network offers two-way video and audio communications for classes 60 hours a week.

"From 4 to 10:30 p.m. you can't get on from Monday through Friday," said Tom Lesan, SWCC vice president of economic development. "During the day there is time available, but that will change. Right now we have 274 different offerings, and that will continue to grow."

"This time last year it was brand new and we hardly had any classes," said Stacy Rockhold, SWCC coordinator of fiber optics scheduling. "This is the first semester of a full schedule. Right now we have 150 programs already set for the spring semester, and by the time we get into it we'll see that double, at least."

### From master's courses to industrial training

The evening schedule is a full slate of master's level classes and industrial training programs through an agreement with Iowa Western Community College. During the day, high school and col-

lege undergraduate classes are offered. A variety of adult continuing education programs are available on weekdays and Saturdays.

Lesan said a proposal is being prepared for a second ICN classroom at SWCC to meet the scheduling demands.

"One advantage of this kind of network is, we can offer a class for industry on inventory practices, for example, and if we just tried to run it, we'd have maybe three students in Creston, two in Red Oak and one in Osceola," Lesan said. "The cost would be prohibitive. Now that we're tied in with people from several sites, we can pay \$350 for one downlink, and then offer it around to all the sites and charge only \$15 per student. That kind of use is unending to me."

Two classes are originating from the SWCC fiber optics classroom this fall. DeeAnn Stults is teaching a college algebra and trigonometry course, and Tom Brotherton is teaching microbiology. Mount Ayr, a pioneer in the area among local school district ICN sites, originates a German class.

"We currently have five teachers trained to use the system," Rockhold said. "There are a lot of things for them to remember. They have to stay on camera, use the touch-screen computer to call up the remote sites, and try to keep students from those other sites involved. They also have to get tests mailed or faxed in time, and get those results out in a timely manner."

### Star Schools Program funded original sites

The fiber-optic system was developed in part through an \$8 million grant from the federal Star Schools Program, which called for

improving educational opportunities through long-distance learning. Partial funding to equip the state's first 103 classrooms came from that grant. Each county has at least one "end point."

The grant also funded Rockhold's position initially. In addition to scheduling classes, she was involved with Green Valley Area Education Agency 14 in training 100 teachers from 22 school districts in the area.

The original list of users authorized by the Iowa Legislature included all schools, Iowa Public Television, libraries, community colleges, regent universities, private colleges and universities, the Iowa National Guard and state government agencies. Access to ICN is limited to non-commercial users.

Southwestern is one of the 15 regional switching centers built in the initial phase of the network's construction. Phase II extended connections to terminals in each county, such as Bedford, Corning, Greenfield, Lamoni and Mount Ayr schools.

Pending approval in the legislature is funding for Phase III connections over the next three to 10 years. "All the other K-12 schools, AEAs, local libraries and anything else fitting into the plan will be hooked up," Lesan said.

"I hope it goes through," Lesan said. "The more people on the system, the more benefits we'll see."

The state will pay for the connections to local school buildings in Phase III, but those districts are responsible for providing a classroom and purchasing the cameras, monitors, microphones and computerized podium. Those costs could range from \$15,000 to \$40,000 per school.

## Internet arrives

By LARRY PETERSON  
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Classes brought to Southwestern Community College through microwave transmission and underground fiber optic cables are just a part of the new technology on campus.

Two weeks ago, equipment was installed that will allow students and staff access to the Internet system.

What is Internet? Teresa Maeder, SWCC computer specialist, said a well-known term is the most accurate description.

"It really is an information super highway, with thousands of off-ramps," said Maeder. "The staff will use it for research, and to 'speak' to colleagues at other schools. I talk to sales people on it, because they can call in from anywhere on the road. It's handy as an electronic mail service."

Eventually, everyone at Southwestern who is hooked up to the Digital VAX system will be able to access the global communications network. Students will have access in the Learning Resource Center.

"What they call an IP address has been assigned to us," Maeder said. "It's a 10-digit identification number. Then, each person has another number as part of the sub-net."

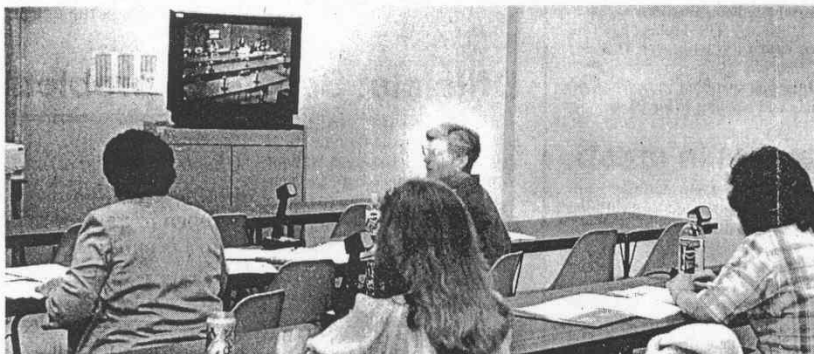
Ten staff members will undergo training Nov. 3 and Nov. 7. They will train the remainder of the staff.

Demonstrating the system Thursday, Maeder and fiber optics coordinator Stacy Rockhold showed the system's access to current weather forecasts and maps, analysis of recent Supreme Court rulings, and even a "conversation network" among users on the guilt or innocence of O.J. Simpson.

The purchase and installation of a router for the system cost Southwestern \$8,500 and the computer software necessary to get on line with Internet was another \$3,000. Plus, there is an ongoing data charge from the Iowa Communications Network for use of the long-distance phone lines.

Policies and charges for individual use haven't been established yet, Maeder said.

"One feature that will really help us is that we can communicate with our other campuses at Red Oak and Osceola, for such things as administrative functions or student registrations," Maeder said.



CNA photo/LARRY PETERSON

## Electronic classroom

Tuned into a home health aide class from North Iowa Community College are, clockwise from top left: Sue Ann Freemyer, Delores Edgington, Shawnda Leeps and Donna Alexander. The Southwestern Community College classroom has microphones for each student and three monitors to communicate with the originating site and other "remote site" students.